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## ORIGINAL DEPARTMENT.

### COMMUNICATIONS.

#### NOTES ON HEADACHES.

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In Nos. 908 and 909 of this Journal, I dealt with the subject of certain types of headache, and as there still remain some forms of this disorder which are either undescribed, or ill-described, I do not hesitate to ask anew the attention of your many readers to this always interesting subject. I do this with the more satisfaction, because, since writing my last articles, I have received a number of communications from physicians recognizing the value of some of the hints which a large experience enabled me to give.

And first, as regards the headaches from eye strain. Of these, since writing of them, I have seen, through the kindness of physicians chiefly at a distance from here, some notable cases which have yet further enlarged my experience. I have mentioned, pp. 82 and 83 (August 1), that astigmatism, disorders of accommodation of the eye, and defects of power to converge or diverge the optic axes, are alike the causes of head pains. The competence of the latter defects to give rise to pain is undoubted, and it is not hard to see how the constant effort to force a feeble muscle up to its work might produce fatigue of the centre involved, although, why this form of over exertion should by and by occasion pain is less easy to see; but, in fact, the causation of intra-cranial pain is as yet so thoroughly obscure, that we altogether lack the means of comprehending its true site, and the mechanism of

its origin. While, for example, we know that the cerebellum does not feel pain from direct irritation, we also are aware that many cerebellar growths, even those which do not increase the cranial contents, and do not cause meningitis, may yet give rise to horrible torment. This may serve as an example of the peculiar difficulties of the subject, and, indeed, seems to make it likely that many insensitive parts of the brain may, from over use, strain or disease, become the parents of pain, probably by reflected disturbances of sensorial centres, such as we often see exhibited in many forms of disease.

It is still less easy to see why astigmatism should bring about similar results, since in some forms of defective vision, such as atrophy of the discs, it is common to observe an utter absence of the head pains.\* The one trouble, like the other, must involve long and constant effort, yet I am quite sure the one is far more often a cause of pain in the head than the other.

There is yet another point to which I should call attention, because I have again and again seen it curiously illustrated, and because it is so apt to mislead. A man has astigmatism, or other defect of vision, during years of perfect health. He does not feel the trouble. He does not know that it exists. Then comes an illness, a fever, a dysentery, or he has a period of domestic or business anxiety, and at once begins to have headache and sense of strain; at first only during long use of the eyes, then after brief use, or any attempt to write or read. By and by the mere exercise of the brain in think-

\* Perhaps astigmatism is rarely present without coincident defects of accommodative capacity.

ing gives pain, and naturally he is told that he needs rest, that he has been over-worked, and so on. At last we discover that he has an eye trouble. It is carefully corrected, and slowly or speedily, but surely, the whole range of head troubles disappear, to return no more. This sequence is not rare, and is an interesting illustration of the way in which disorder or fatigue of one cranial centre may radiate mischief upon others.

In a few cases, the perturbing cause which gives force, for evil, to the eye troubles, is of such brief duration that it seems hardly possible it could have been efficient for mischief, yet the following case attests the truth of my statement.

M. C. B., æt 51, lawyer. A short, well-built man, in good health until September 7th, 1874. Up to this date he had no disease, and no sense of difficulty in the use of his eyes. At this time he experienced during one night the most intense anxiety, owing to the extreme illness of a near relative. During the night he had vertex headache, and, while writing, at times found the letters misty, or that he could not see them for a moment. The pain came on two hours later, with excitement of mind, and a feeling as if he was in peril of losing control of his actions. Early in the morning he used ice to the head, which eased him so that he slept two hours. The same symptoms, in a lessened degree, continued all next day. Then gradually he grew better, and was well on the fourth day. From this time, however, he began to have certain head troubles on reading or writing.

I saw him in October, 1874. If he read or wrote, within two minutes he began to have an uneasy feeling in the scalp, a sense of heat in the head; and soon, if he persisted, a dull sense of increasing pain, chiefly on the top of the head, or at the back. After using the eyes an hour, the pain became fixed on the vertex, and lasted all day. Rest, and a stay at the seashore brought relief; new use of the eyes restored the pain to its old seats. The heart, kidneys, and stomach were healthy. There was no vertigo, no ear troubles, no numbness.

After repeated study of his case, I felt sure he had ocular defects; and therefore, explaining my views to him, I asked him to see an ophthalmic surgeon.

Dr. Wm. Thomson, to whom he went for advice, writes as follows concerning him:—

"This gentleman, on October 7th, informed

me that for a month past any prolonged attempt to read or write would cause a dull heavy ache in the vertex and occipital region, which would continue all day long, and that it had become so severe that for the past five days he had not been able to read at all. He was fifty-one years old, had never used glasses except for near work, and used for this purpose  $+\frac{1}{15}$ . The acuity of each eye was  $\frac{20}{300}$ , and this was further reduced by the instillation of atropine to  $\frac{20}{1}$ . By the ophthalmoscope and other tests, it was found that he had long sight in different degrees in the same eye, or long-sighted astigmatism, and with this exception, his eyes were entirely free from disease.

"His optical defect was found to be  $=\frac{1}{15}$  for lines at  $120^\circ$ , and  $=\frac{1}{15}$  for lines at  $30^\circ$ , and his acuity of vision was increased from  $\frac{20}{300}$  to  $\frac{20}{100}$  or  $\frac{1}{3}$  by a combination of spherical and cylindrical glasses, as follows:  $+\frac{1}{15}^s \cdot \bigcirc + \frac{1}{60}^{cy} \text{ ax. } 120^\circ$ . He was directed to use this constantly, to save the strain upon his accommodation, which, before the use of atropine, enabled him, by a constant effort, to preserve his acuity of vision at  $\frac{20}{300}$ , when with paralyzed accommodation, his vision was really but  $\frac{20}{1}$ . His old sight was likewise corrected, for all near work, by  $+\frac{1}{15}^s \cdot \bigcirc + \frac{1}{60}^{cy} \text{ ax. } 120^\circ$ ; and he was directed to use the latter for all reading and writing.

"November 1st. He reported that he could not dispense with the distant glass, and that with the others he could read five hours together; could read at night; could use his eyes all day without any pain, and considered himself entirely relieved."

His amendment was indeed rapid, his relief entire, and he now uses his eyes without thought of pain or trouble.

I could give, I think, no better example of the way in which a permanent unfelt defect is lifted into evil influence, by some brief but potent disturbance of the cerebral centres.

#### The Headaches of Children.

On page 81 and 82 (Aug. 1st), I spoke at some length of the headaches which I have so often seen in children; but I believe that I did not make clear enough the fact that these forms of head pain are very often not to be traced to over-use of the brain, and I make this statement because I spoke of them under the heading of "Pain From Overwork," while I am quite sure that, although pain from this cause is only too common at the period of growth, we often see

examples where it was out of the question to lay the evil to this, or indeed to any obvious or controllable cause. I have seen, of late, since my last paper was written, a number of these cases, which are so monotonously alike as to make it hardly worth while to report them all. A case or two may suffice.

T. B., a slight, handsome lad, aged 13, consulted me in November, 1874. His winters were spent here, his summers in a healthy country home, from May to September. He is a clever lad, but has never been pushed hard in the way of brain work.

When six years of age, without any history of sun-stroke, he began to have, every May and June, headaches, which became less common and less severe as autumn came on. These attacks lasted three to five days, and ended in sick stomach or in diarrhoea, or sometimes the headache continued a week or two in a more trifling form. During the acuteness of the pain he was forced to stay in bed. In the next winter he had no pain, but in June, 1873, he had a terrible headache, which lasted ten days.

July 3d he had a headache which continued for three weeks, since which time he has never been one day without pain. The slightest attention, the least effort at writing or reading, reproduces the pain, which is readily relieved by open air exercise, unless this be very violent, when it also becomes a cause of new pain. As is usual in these cases, moderate steady use of the bromides, ten grains thrice a day, and an out-of-door life, proved to be the best of remedies.

At present, in January, 1875, he is able to work an hour a day at his lessons, and to read a little. Steady perseverance in this careful mode of life, with light gymnastics, and the medication above mentioned, will, I am sure, enable him, in a year or two, to go back to his full amount of mental labor.

I have quoted this case from my note books, as a fair but well marked example of the headache of the time of growth. Many of these cases, however, come on more gradually, and not, as in this case, from a background of spring headache. I have seen, in the last two years, eleven cases of headache originating between the ages of eight and fourteen, in males. In all of these it was impossible to study or read without causing pain, and in none of these was there any notable reason to suspect the eyes as a cause.

Most of the cases which I have followed long enough, grew better or well when absolutely relieved from work, when sent into the country, kept out of doors and placed under steady use of bromides. Of course, where there was reason to suspect that the general tone of health was low, or where anæmia existed, the proper treatment by iron and tonics was not neglected.

I had last year under my care a very charming little girl, æt. nine, whose case was in almost every point like that of T. B. Her pain, however, began gradually, when at the age of seven, and was first observed after violent exercise, which will sometimes, in adults unused to exertion, cause temporary pain. As soon as this child began to have lessons, the effort at attention became a cause of pain, and after this, her history resembles in every way that of the last case.

Sometimes the liability to headache is of briefer duration, and exists only while the child is exposed to causes which lower the tone of health.

C. J., æt. fourteen, a large, sturdy girl, began to menstruate at thirteen, and is now painlessly regular. When ten years old, she is said to have overworked herself in preparing for a school exhibition of music, one of those bad and useless modes of ending a school term, which are full of evil for the moral, mental, and physical organization of girls. From this time dated a liability to headache on any mental exertion. No day passed without pain, and the whole tone of health soon began to be visibly lowered. After three months my wishes were fully carried out, and she was sent to live in the country with a friend of her mother. This sensible guardian, following out my views strictly, allowed her to ride on horseback, forbade music and all books, had her to read half an hour thrice a day. Shower baths, and small doses of bromide of potassium were added a little later, and in three months she became well. A return to school renewed the trouble, and again four months out of town permanently dismissed the headaches, although ever since she has been carefully guarded against the least excess in work.

I incline to believe that this peculiar headache is more common in boys than in girls. In girls there is also, during the years of puberty, as every physician knows, a liability to headache, which may disappear when the menses are thoroughly established, but this is not to be

confused with the disorder to which I have here asked attention.

It is impossible for a thoughtful physician to see many of these cases without venturing to speculate upon their cause. We very well know that whenever an organ is called into functional activity, it finally flushes, and probably on this account rises in temperature. A few hours of steady intellectual labor causes the face, in most persons, to redden, and the feet to grow cold. It has been shown by Dr. Lombard, that under such circumstances the heat of the head measurably increases. This is the normal mechanism, but in many cases of disease the slightest exercise of an organ such as the brain at once causes the blood vessels to dilate to an extreme degree, and produces in a few minutes, and to an abnormal extent, the vascular conditions which in health are only slightly present after hours of use. In this manner occur these headaches of congestion, which belong to the period of growth, and which, in adult life, are brought about by too prolonged mental activity, under the stimulus of worry and excitement.

The same sequence of too sudden dilatation of vessels is the cause of many of the states of sudden fatigue which, in some women, especially follow every exertion, physical or mental. The ultimate cause of all of these states is often to be found in conditions of anæmia, but in every case the rapid production of excessive vasa distention is the parent of new defects of nutrition, since both anæmia and congestion alike interfere with the healthy repair of organs in use.

I am quite well satisfied that the headaches of childhood (six to fourteen years) are really headaches of fullness, of congestion. The face gets more and more red as the attack is more and more severe, the head throbs when at the worst, and in some cases the temporal arteries, which do not often beat visibly in children, may be seen distended, as they are after a full dose of nitrite of amyl. I have tried several times to compare the state of the eye-ground vessels before and during a bad headache, but although I have sometimes conceived the disc to be unusually red in the time of worst pain, the difference has not been very remarkable; certainly, however, the disc does not become at these times anæmic.

The children who are thus affected are remarkably sensitive to nitrite of amyl, which,

as is well known, I have for some years resorted to as a test of the congestive character of various forms of head trouble, [see *Philadelphia Medical Times*, 1872]. Last week I had a curious example of this. I had just used the nitrite of amyl with perfect success, to ward off an attack of unilateral epileptic spasm, which began in my patient while I was talking to him. It checked the fit and caused no head pain. A few minutes later I allowed F. B. to inhale two drops. The effect was sudden, and the lad cried out at once that he had terrible headache. The contrast was altogether remarkable.

I cannot, I think, be suspected of having dealt too long, or too gravely with this matter of the headaches of children, when I state that these cases of head pains, which an ample experience has proved to be amenable only to fresh air, absence of work—years of such care and the simplest nerve-soothers, like small quantities of bromides—have been dosed in vain, with every conceivable drug, leached, blistered, and so on, and that I have again and again been called to see them, as cases of dangerous promise.

In my next paper I hope to treat of some of the more unusual forms of headache in adults. Such as some forms of megrim followed by functional hemiplegia, and also certain of the headaches most common in old age, or in the decline of life.

#### PUERPERAL MANIA.

BY JOHN S. HUGHSON, M.D.,  
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There are few, if any, who have ever come in contact with mania in the puerperal period that desire a renewal of acquaintance with a malady so formidable in its features, and often so unfortunate in its termination. It, probably, occurs less frequently in private practice than in Lying-in Hospitals, even in the same proportion of cases. And Dr. Fordyce Barker, in his recent excellent work on "The Puerperal Diseases," quotes from the "Obstetric Clinic" of Professor Elliot, who says: "In Bellevue we receive a great many cases of puerperal mania, on account of the fact that so large a proportion of our pregnant women are unmarried primipare, and because others, of the poorest classes, who cannot be controlled at home, are sent to the hospital."

Dr. Barker himself says: "I estimate the ratio of puerperal mania to the whole number of



cases of labor to be one in eight in this hospital." In describing this affection, Dr. B. says:—"When the malady is fully developed, the patient becomes very boisterous and noisy, incoherent in her language and in her gestures. She stares wildly at imaginary objects in the air, seizes any word spoken by those near, and repeats it with 'damnable iteration,' clutches at everything and every one near her, throws off all covering, jumps from the bed, and even the most refined and religious women, when possessed with the demon of puerperal mania, will scream out oaths and obscenity with a volubility perfectly astounding."

Under the head of *causes*, Dr. Barker says "it is my firm conviction that mental emotions constitute the exciting cause of puerperal mania more frequently than all other causes combined." He further says: "I will mention a curious fact that has occurred in my experience. Since 1855, I have seen thirteen cases of puerperal mania in the wives of physicians. All but one were primiparæ. It has struck me as very extraordinary that so large a number should have occurred in one special class, and I think the following is the probable explanation: 'All of them were ladies of education, and more than usual quickness of intellect, and, beginning a new experience in life, and having access to their husbands' books, they probably had read just enough on midwifery to fill their minds with apprehensions as to the horrors which might be in store for them, and thus developed the cerebral disturbances, just as any other moral emotions may.'"

*Treatment.*—It being obvious that the "leading indication" is to allay the brain excitement, Dr. B. refers to the accomplishment of this under three principal points of treatment:—

"1. By restoring exhausted nerve power.

"(a.) By improving the nutrition of the brain;" by plenty of good, easily digested food; and in many cases the administration of tonics. Those he most frequently recommends are the tincture of the chloride of iron, the chlorate of potash, and the sulphate of bebeerine. "The latter is greatly to be preferred to quinine, from the fact that it has much less tendency to induce cerebral congestion."

"(b.) By inducing sleep." The chloral hydrate is the medicine found most beneficial and more peculiarly applicable to fulfill this indication than any other, in the author's experience. Chloroform has not, in his hands, proved

to be of much service. He says, "Chloroform is of immense value in preventing and controlling convulsions, but is of no service in producing sleep and allaying excitement in the maniacal. The chloral hydrate has very little if any influence in preventing or controlling convulsions, but is by far the best agent known for inducing sleep in puerperal mania. I usually prescribe it in fifteen or twenty grain doses, well diluted, to be repeated every two hours until the effect is produced."

"2. By combating all complications.

"(a.) Functional." As constipation, deficiency of renal secretion, over-distention of the bladder.

"(b.) Cerebral erethism. Maniacal excitement often produces a cerebral erethism; shown by the flushed face and red eyes; which, no doubt, was formerly often mistaken for phrenitis. It is in just these cases that the bromide of potassium is very useful. I have frequently seen great benefit from giving twenty to thirty grains once in six hours. But it does not often induce sleep, under these circumstances, and so at night I suspend the bromide, and give the chloral hydrate."

"(c.) Local inflammations. The treatment must be adapted to the special form and locality of the inflammation, modified by the general condition of the patient."

"3. By such moral treatment as will best secure the patient against all causes of nervous excitement, and will tend to excite in her a desire to obtain self-control. This is difficult to define in words, and still more difficult to secure. It implies the greatest kindness, but no demonstration of excessive solicitude; firmness, but no appearance of governing or controlling; incessant care and watchfulness, concealed by an air of indifference; a ready tact in turning the current of thought or will, but no contradiction or impatience. Few nurses, and still fewer friends, are able to exercise all these combined qualities. The physician will better teach them to the attendants by his own manner when with the patient, than by didactic instructions."

In closing this brief summary of an interesting and instructive chapter on puerperal mania, I will notice a case falling under my care some months ago, and, though the treatment pursued was in one respect different from that recommended by Dr. Barker, it proving successful was eminently satisfactory to me.

I was called about 11 o'clock, A. M., on the 14th of April, 1873, to see ———, multiparæ, who had been confined five days before, and who, until the night previous, had been doing well. During the day of the 13th she had been much worried, mentally, in regard to relations of a domestic nature; that night she was nervous and restless, and slept but little; she took a little nourishment on the morning of the 14th, seeming better; about ten o'clock she commenced acting strangely, said she was dying, muttering to herself, not allowing attention to be given her by any one. On my arrival, I found her seated up in the bed, wild with maniacal excitement; saw visions of death, coffins, friends and children long dead; would cry piteously, then break out in a tearing rage; would allow no one to go near her, and finally, getting into one corner of the bed (which was placed in a corner of the room), and seizing a stick that was leaning against the wall, she defied the approach of all.

After two hours' watching, waiting, and using gentle persuasions (once succeeding in getting her to take into her hand a glass containing a solution of chloral hydrate and bromide potassium, but the contents were quickly thrown at the attendant, and the glass hurled from her), without accomplishing or even a prospect of accomplishing any good, I determined to try the effect of a hypodermic injection of morphine. So having her seized by three attendants, and held as well as possible, I injected into the arm near the wrist (being the only available place) one-half grain of morphine, and one-sixtieth grain of atropine; as soon as the injection began to take effect the mania commenced to subside, and in an hour, by gentle persuasion, I succeeded in getting her to take ten grains each of chloral hydrate and bromide potassium; this was repeated in half an hour, when she fell asleep, and slept two hours. Upon awaking seemed much less excited, and was more manageable. Directed the chloral and bromide, in five grain doses each, to be given every hour, and such easily digested nourishment as she would take.

April 15th. Rested tolerably well last night; lays quietly in bed; notices the child; takes nourishment; ordered the chloral and potassium solution (five grains each) every three or four hours, and a double dose at night if nervous and restless.

April 16th. Bromide potassium, twenty

grains three times a day; five grains citrate of iron before each meal, and chloral hydrate at bed time. Under this treatment she improved mentally and physically for some days, then lapsed into a state of melancholia, from which it seemed almost impossible to arouse her. A change of scene and continuation of the iron, with the bromide of potassium when needed, resulted in a gradual but steady improvement, until the night of the 17th of July, when, from the effect of violent *mental worry*, she was again seized with acute mania, and when I saw her she was bound with cords to prevent her injuring herself and those around her; pursued the same treatment, immediate and after, with the same pleasing success. There has been no recurrence of the mania, and her health is permanently restored. In the main the treatment in this case was that recommended by Dr. Barker; but what would I have done without the hypodermic injection? It certainly aided materially in the management of the patient, and I think was decidedly beneficial in the treatment of the disease itself. Dr. B. says: "I think I have seen opiates prove of great service, in some few cases, when I have believed that the mania was complicated with latent pelvic peritonitis. But it is only in such cases that I have ever found them apparently useful."

This being a single case, may be an exceptional one, nevertheless, I would pursue a like course under similar circumstances, and advise a trial of it by others as a means of better managing the patient, if not, perchance, the disease.

### ANATOMY OF THE PENIS.

Translated from Hyrtl's *Handbuch der Topographischen Anatomie*, Zweiter Band, p. 67, for the MED. AND SURG. REPORTER.

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#### The Two Corpora Cavernosa of the Penis.

The penis has three corpora cavernosa. Two belong to the penis proper (corpora cavernosa penis), one to the urethra (corpus cavernosum urethræ). On this account the cylindrical form of the penis changes to a triangular prismatic form, with its angles rounded off, as we see in antique priapi. These have not, even at the present day, gone entirely out of date, and in Calabria, before the entry of the Piedmonts, they were blessed, at different places, by the priests, as amulets for pious but unfruitful women.

The two corpora cavernosa of the penis arise from the point of juncture of the ascending rami of the ischium with the descending rami of the pubes, but chiefly from the latter. They are, therefore, in the beginning, separated from one another by an intervening space, which is equal to the distance between the rami of the two ischiatic bones. At their origin they do not possess that cylindrical form which belongs to them in the pendent portion of the penis. In the direction from the interior to the exterior they are flattened. They extend in a converging direction, as the crura penis, from their point of origin till they arrive in proximity to the symphysis pubis, in front of which they join one another, grow together, and form from here on the pendent portion of the penis. Their periphery is not circular, but elliptical. By means of their being placed together, a superior and inferior long furrow necessarily originates, just like that between the barrels of a double-barreled gun. The superior furrow receives the dorsal blood vessels of the penis, and the inferior furrow receives the urethra, with its corpus cavernosum. The walls of the two corpora cavernosa, growing together, form a perpendicular septum in the interior of the penis, which is visible on section of the organ. Each corpora cavernosa consists of a strong but extensible tunic (albuginea), interwoven with elastic and contractile fibres, with an internal texture of blood vessels whose venous portion exceeds by far the arterial. The fibrous tunic of the corpus cavernosum sends inwardly a number of trabecular-shaped prolongations (trabeculae), which join together in a network, and serve as support to the vascular tissue. The occurrence of smooth muscular fibres in trabeculis was proven by Kölliker. Anteriorly, the two corpora cavernosa of the penis, joined together, become round and somewhat pointed, but diverge slightly at the same time, and become covered, as if by a cap, by the deep concave basis of the glans, which originates through unfolding of the corpus cavernosum urethrae. Upon the dorsal surface of the penis, the albuginea in the long furrow for the reception of the dorsal blood vessels forms a considerable thickening, like that portion of a double-barreled gun situate between the barrels. Of course, this thickening is also found deep in the glans, between the somewhat diverging extremities of the corpora cavernosa, where it increases a little in bulk. At this point, indeed, it is described as the so-called "cartilage of the glans,"

in which anatomists supposed they had found an imitation of the os priapi occurring in so many sucking animals. According to Henle, this structure extends through the long axis of the glans to its extremity, where it connects above the opening of the urethra with the cutis.

At the root of the penis, the septum, formed by the connecting together of the two corpora cavernosa, is complete. Toward the end of the penis it is pierced by several openings, and disappears completely in the neighborhood of the glans. The compartments of the two corpora cavernosa, therefore, stand in communication with one another, which, for an equal distribution of blood, and a rectilinear erection of the penis in the median plane, is highly necessary. The corpus cavernosum of the glans, on the contrary, has no anastomosis of blood vessels with those of the penis.

The relations of the blood vessels in the corpora cavernosa are the following:—

The arteries set apart for the corpora cavernosa are the double arterial dorsales penis for the glans, and for the corpora cavernosa proper, the likewise double arteriae profundae penis. Both are the terminal branches of the arteria pudenda communis, a branch of the hypogastrica. The first extend superficially in their length. We can see and feel their pulsation during erection. A wounding of these arteries, followed by consecutive aneurism, was seen by Malgaigne in a young man who carried a penknife, open, in his pants pocket, and who, upon stooping forward, wounded himself on the dorsum of the penis. The arteriae profundae penis enter the corpora cavernosa, not far from their origin, and send their originally spindle-ring-shaped, numerous branches, along the trabeculae, and allow the preponderatingly large number of the same, without becoming capillary, to empty, funnel-shaped, into the wide entrances of the veins.\* True capillary blood vessels are found, notwithstanding, in each corpus cavernosum. Thus the trunks of the larger arteries are surrounded by capillaries, and, indeed, single branches of the main trunk of the arteria profunda penis divide gradually into capillaries, which likewise, in their course, remain in the trabeculae of the corpus cavernosum. Thus is the affair at present demonstrated. If the demon-

\* According to Krause, the small arterial branches emptying into the cells of the corpora cavernosa still retain a diameter of 0.1". The extremities of these branches should be somewhat prominent in the cellular spaces, which occurrence I have never seen.

stration be correct or not, still remains uncertain. He who has been engaged in the injection of the corpora cavernosa will acknowledge that he has never succeeded in forcing the material injected from the veins into the arteries, which, if the above demonstration corresponded with the anatomical construction of the corpora cavernosa, would have to take place each time. The study of the art of making anatomical injections is, at the present day, entirely too much neglected, because there are much more convenient departments of anatomy, which, requiring much less skill, time and work, yield greater profits.

The veins, which have only retained their internal coat, completely fill up the spaces of the network of the trabeculæ in the corpora cavernosa, and hold the same relations to them that the veins of the cranium do to the sinus duræ matris, or to the canals of the diplœ. We could, therefore, name each corpora cavernosum a neutral plexus between ample arterial and just such venous elements, which, indeed, in its finest parts, does not possess capillary dimensions.

In the axis of the corpora cavernosa the cells of the trabecular net are large; toward the bordering integument they become considerably smaller, and their course becomes predominantly oblique. The venæ profundæ penis, coming from the venous plexus, empty into the venous tresses surrounding the neck of the bladder and prostate (plexus santorini), whilst the single trunk of the vena dorsalis penis usually divides into two branches beneath the symphysis pubis, which go over into the corresponding plexus venosus pudendalis. One or two lymph vessels accompany the vena dorsalis penis. Not unfrequently the vena dorsalis penis also unites with one or both saphenous veins, through pretty strong anastomosis; also frequently with the vena epigastrica superficialis.

The venæ profundæ penis stand in manifold communication with the vena dorsalis, which is brought about through the so called venæ circumflexæ. We notice, namely, in an injected penis, in the furrow between the corpus cavernosum penis and the urethræ, that veins emerge which communicate with the cells of both kinds of corpora cavernosa, occupy the lateral region of the shaft of the penis, and empty into the vena dorsalis. Their number and length are variable. The one nearest the symphysis is the largest, and also the most constant.

The corkscrew-shaped, small arterial branches

(vasa helicina), discovered by J. Müller, and corroborated by Krause and myself, are numbered to the vascular structures for the enlargement of the diameter of the penis. Notwithstanding they are only found at the root of the corpora cavernosa as far as the pendent portion of the penis, I have filled them in animals (apes and foals) by means of injection, and must decide against the assertion of Valentin, that they are artificial productions, for which they are also taken by Langer. Henle\* also expresses himself in favor of their existence.

#### The Corpus Cavernosum Urethræ.

If we name this body simply corpus cavernosum urethræ, the appellation is in so far correct, that this corpus occupies a median position. But in its interior, particularly at its anterior and posterior extremities, are found unmistakable traces of a septum, which attest that its apparent individuality depends upon the blending of two lateral halves.

It has no bony attachment like the corpora cavernosa penis. Its commencing portion, which lies between the crura of the corpora cavernosa penis, is called bulbus urethræ. The bulb encompasses the urethræ in such a manner that it possesses a much greater thickness in its inferior than in its superior wall. The corpus spongiosum in its anterior course becomes smaller, but towards its extremity again increases in size to form the glans penis.

The corpus cavernosum urethræ can be completely isolated from the corpora cavernosa penis, and appears then (provided it has been previously injected with a hardening mass) like a well-saturated sponge, whose thick bulb is represented by the bulbus penis, and whose anterior expansion is represented by the glans penis. The shaft of the corpus spongiosum, however, does not plant itself centrally in its anterior expansion, but at its inferior border. It does not receive its supply of blood from the arteries of the corpora cavernosa penis, but receives a branch of its own from the perineal artery, which, as it enters the bulbus urethræ, is termed arteria bulbosa. It often possesses another artery, the arteria bulbo-urethralis, which enters the corpus spongiosum more anteriorly, and is regarded by some anatomists as constant (Arnold). It is much smaller than the arteria bulbosa and the arteria dorsalis penis.

\* Complete collection of all assertions and views in reference to this question in his Handbuch der Systemat. Anat. 3 band., p. 403.



The corpus cavernosum urethræ, upon the whole, is inferior in size to the corpora cavernosa penis. During the maximum of its erection it never becomes as hard as they, but remains soft and compressible. During rough efforts at the reduction of a paraphimosis, it can easily become torn by pressure on the glans (Ricord). Its cells, which are smaller and less rich in blood, communicate, of course, as Kobelt has shown, with those of the corpora cavernosa penis. It is, therefore, not a completely closed erectile body, as we believed till the present, in which no transmission of disease could have taken place from the corpora cavernosa penis. If we make an orifice in the glans penis of a cadaver, and introduce a tube into the wound, through which, by injection, we fill the cellular system of the corpus cavernosum of the glans with a soft, waxy mass, this substance flows into the corpora cavernosa penis in a small quantity, into the corpus cavernosum urethræ in a larger quantity, but in the largest quantity into the venæ subcutanæ penis, which empty into the vena saphena magna. Vasa helicina occur in it, but not in the glans.

The amount of blood in the glans, in ulceration of that body, may give rise to important hemorrhages. Its spongy tissue sometimes becomes, to a great extent and depth, destroyed by chancre. It reproduces itself very rapidly, and after the greatest loss of the substance of the glans, we see only very superficial scars remaining. Papillæ, placed in long rows, we first notice when the glans has been deprived of its epidermis. Papillæ of the larger kind, which can be distinguished as white points through the epidermis, are usually found in the so-called crown of the glans. Single ones also occur in proximity to the frenum, where Henle saw them, appearing like the papillæ vallatæ of the tongue, surrounded by a low membranous wall.

The nerves of the corpora cavernosa are: 1. The two nerves on the dorsum of the penis which arise from the plexus pudendalis, and, in company with the dorsal blood vessels, extend to the glans. 2. The plexus cavernosi, prolongations of the plexus hypogastrici of the sympathetic, which take the same course as the arteriæ profundæ. The terminations of these nerves are still entirely unknown.

The lymphatics divide into those lying superficial and those lying deep. The former extend to the inguinal glands, and carry the matter of contagion to them. The latter perforate the

fasciæ closing up the arch of the pubis, and at the side of the arteria and vena profunda penis penetrate the pelvic cavity, in order to go in quest of the glandulæ hypogastricæ.

## HOSPITAL REPORTS.

### PENNSYLVANIA HOSPITAL.

Clinic of Dr. R. J. Levis.

REPORTED BY DR. JOHN B. ROBERTS.

#### The Treatment of Fracture of the Lower End of the Radius.

A man was admitted to the hospital who said that the evening previous he had fallen upon the ice, and by extending his hands to save himself, had received the force of the fall upon the left palm. The patient had much pain at the wrist, which was swollen, and upon careful examination it was determined that the ulna was intact, but that a fracture existed at the lower end of the radius, near to the joint.

The existence of Barton's fracture was suspected, from the manner of receiving the injury and from the deformity presented; and this diagnosis was verified when crepitus was obtained by accurate examination.

The clear recognition of this fracture is of the utmost importance, for it is often overlooked, under the impression that the injury is a sprain; and it may be mistaken for a dislocation, on account of the peculiar deformity resulting; while, on the other hand, the treatment required is peculiar, and the cure, notwithstanding most judicious management, is sometimes followed by impairment of the functions of the part.

Attention was first prominently directed to this peculiar injury by Colles and by Barton, the former describing the fracture occurring at a short distance above the joint, the latter referring especially to the line of fracture entering the joint obliquely. The fracture may be simple or comminuted, and perhaps usually the line is obliquely upward and outward, splitting off the outer portion of the inferior extremity of the bone.

The wrist-joint is formed by the articulation of the radius with the first row of carpal bones, which form an arch fitting into the lower end of the radius, while the ulna has practically nothing to do with the articulation. Therefore, when a man falls forward upon the palm of his outstretched hand, the impact is transmitted through the carpus to the radius, which is broken by the force driving the wedge-shaped carpal bones into the concavity of its lower surface. This is the mechanism of Barton's fracture, while the true Colles fracture is more likely to be produced by direct violence to the wrist.

The deformity resulting from this injury is peculiar, and the similarity, in appearance, to dislocation of the wrist is such, that an error has not infrequently been committed; although

a dislocation at this position is an accident of very rare occurrence. The lower fragment, with the attached carpus, drawn upward and backward by the extensor muscles, causes a protuberance on the dorsal aspect of the wrist, and a deep concavity on its palmar surface. There exists also lateral displacement toward the radial side of the forearm, because, the ulna being intact, acts as a splint on one side, while the muscles draw the inferior fragment of the radius upward on the other, causing shortening on that side.

The diagnosis between this fracture and dislocation of the wrist is readily made, if care be taken, for although the fracture resembles in appearance a luxation, the deformity is readily overcome by extension and counter-extension, and returns as soon as the parts are left free.

The prognosis, when the injury occurs in youth or middle life, is generally good, but there may be impaired motion of the wrist and fingers, due to callus pressing on the nerves and tendons. This can usually be overcome to a great extent by passive motion, particularly if motion of the fingers be instituted even while the limb is on the splint.

The very best treatment for fracture of the lower extremity of the radius, and indeed for almost any fracture of the bones of the forearm, except at the elbow, is by means of Bond's splint. What is desired, is to overcome displacement by turning the hand outward and depressing the wrist, but at the same time to leave the thumb extended, since the extensor muscles of the thumb are an active displacing cause.

All these requirements are fulfilled by Bond's

splint, which is made by placing the patient's uninjured arm and palm upon a piece of deal extending from the elbow to the fingers, and then drawing a line around the forearm and the *everted* hand. The splint, made by cutting the board in these lines, and reversed for the injured limb, is completed by tacking a leather edge at each side, and by placing a semi-cylindrical block at the distal extremity, to rest in the palm of the hand. The splint having been well padded with cotton, as in the present case, the injured limb is placed on it, and a bandage applied from the hand upward, leaving the flexed fingers extending over the block.

As the fragments here tend to project, a compress is laid under the upper, and another above the lower portion, before the bandage is adjusted; when pads do not suffice, a flat splint is sometimes required on the back of the forearm.

Perfect relaxation of the muscles is obtained by this apparatus, which keeps the limb in a state of most perfect repose. If you drop your hand carelessly at your side, you will find that it assumes a position midway between pronation and supination, with the fingers semi-flexed, but the thumb extended. This is exactly the position given to the hand applied to Bond's splint.

Occasionally, the line of fracture, instead of running upward and outward, is upward and inward, when the displacement is toward the ulnar instead of the radial side; and the treatment must be directed accordingly.

After four or five weeks the patient will be able to dispense with the splint, and passive motion will be instituted, to prevent ankylosis

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### The Sleeping Sickness.

A curious account of this disease, as it occurs on the West coast of Africa, is given in the *British Medical Journal*, by Surgeon Gore, F. R. C. S. I. It is sometimes called the "African lethargy," *lethargus Africanus*. The first intimation is a swelling of the glands about or around the neck, accompanied by a gradual inclination to sleep, which increases, and the person so affected will fall asleep at all times, and in all places, no matter what he may be doing, working, eating, walking, talking, or anything else, only awaking at short intervals. Sometimes the body swells in the progress of the disease, and at other times in its first stage. The skin becomes dry and dusty; the strength palpably decays; and the most massive form be-

comes reduced. This continues for six or twelve months, more or less. Just before death the patient suddenly ceases to sleep; this is the forerunner of death always. I have never known a Congo to die of any other disease. It carries off many natives; and even the Americo-Liberians do not escape from it. The Congos are among the lowest type of negro, in mind and body, inhabiting the shores of West Africa. When they were liberated in large numbers at Sierra Leone, the disease came far more frequently under observation in the colonial hospital, as will be seen from the following returns. For the four years ending March 31st, 1850, 112 cases of lethargus, or sleeping sickness, were treated; for the seven years ending December 31st, 1866, only 67 were treated. Of the 179 cases admitted, 132 died, 47 recovered, a very high ratio of mortality. Burton, and most other writers on Western Africa,

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allude to the disease as a medical curiosity; the former states that Europeans have died of it. The cases of African sleeping sickness which I have seen in the colonial hospital at Sierra Leone, two of them in the last stage of the disease, presented similar features to those already described; the patients lay upon a mat, sleeping their existence away. One was very much emaciated; he lay quite motionless, and apparently unconscious; only appeared to notice when severely shaken, then merely raised the eyelids and gazed vacantly. The sphincters had already become relaxed; the urine and feces were passed involuntarily; and for some days previous to death he lay quite passive, refused all nourishment, and died.

The termination is usually fatal. A post-mortem is given in one case:—

"The dura mater was found to be in a healthy state; the arachnoid membrane was red, and highly vascular; this condition was not confined to any particular part of it, but prevailed throughout. The pia mater appeared healthy; the substance of the brain was particularly firm, and not one drop of blood appeared on a section of any part of it; the sinuses were unusually deficient in the quantity of blood; the lateral ventricles contained about a drachm and a half of serum; the thoracic viscera did not present any unusual appearance. In the stomach were found many patches of a red color, near the pylorus; these did not extend into the duodenum. A portion of small intestines, about three feet in length, was of a very dark color, and the calibre of the canal at that part was much contracted; this part of the canal contained a considerable quantity of thick sanguineous serosity, and its mucous coat was highly injected. The liver, spleen and kidneys were in a healthy looking state."

#### Transplantation of Skin En Masse.

The subjoined case is reported to the *Medical Times and Gazette* by Dr. C. B. Taylor.

J. P., aged seventy, a farm laborer, residing at Ruddington, a few miles from Nottingham, applied to me in March last, on account of failing vision, which affected the right eye, the left having been useless for many years, owing to complete ptosis of the lid. I found the right eye affected with incipient cataract; and the left, when the lid was raised, much the better of the two. I therefore advised the patient to wait until the cataract was more matured in the right eye, and in the meantime to submit to an operation by which I proposed to raise the lid of the left eye, and so make it to take the place of the right. An effort, I found, had already been made in this direction, by an ophthalmic surgeon, without benefit. The patient, however, consented to the operation; and partly owing to the previous failure, and partly to an *embarras des richesses* in the way of patients, I was betrayed into removing a flap of skin much larger than was necessary, and found, on attempting to close the wound, that it would be

impossible for the patient to close the eye unless a piece of skin were transplanted into the place of that which I had taken away. In order to allow the bleeding to cease, I had gone on with another operation, and thus allowed about twenty minutes to elapse since the skin was excised, and the portion removed, which was an inch and a half in length, and three-quarters of an inch in depth, was lying in the operating-tray, shriveled up, lifeless, and cold. I nevertheless replaced it, and, by means of sutures and pads, succeeded in securing perfect reunion, so perfect, in fact, that it is impossible to distinguish the skin replaced from the surrounding tissue. It resembled at first a portion of white kid stitched to the surrounding skin, and my medical friends were quite hopeless as to the issue of the experiment, a feeling, I must confess, to a great extent shared by myself.

#### Treatment of Serpiginous Ulcer.

The annexed suggestive case is reported in the *London Medical Times and Gazette*, by Mr. Spencer Watson:—

C. W., aged fourteen years, was brought to the hospital on August 14, 1872. She was then a weakly, peevish, irritable, and ill-nourished child, of stunted growth and unhealthy aspect. Her left knee was firmly contracted, and she resisted all efforts to extend the leg. Occupying the inner and front aspects of the lower two-thirds of the left thigh was an ulcerated surface surrounded by irregular curved edges, with a tendency to the crescentic form, the convexity of the curve being outwards. Some of these edges towards the knee had the appearance of being recently cicatrized, but in most of the other parts of the sore the edges were extending by ulceration. The ulcerated surface had a dusky gray, unhealthy aspect, with no true granulations. Every movement of the limb, and of the body when affecting the limb, was exquisitely painful, and caused the child to make loud cries and to resist the slightest effort to extend the leg on the knee. She had suffered from this ulcer for three years. It had been treated elsewhere by the application of caustics, but there had been a constant extension of the mischief in spite of all treatment. Cod-liver oil and a combination of quinine, iron, and arsenic were prescribed, and the gray oxide of mercury ointment applied to the sore, the whole limb being wrapped up in a covering of cotton-wool. Poultices were applied occasionally at night, and a solution of chloride of zinc (five grains to one fluid ounce) was applied to the sore at times, when the appearance of the surface seemed to indicate a necessity for stimulation. In a very short time the surface began to assume a more healthy aspect, and the dose of the arsenic, which was given in the form of liq. pot. ars., was increased from three minims to five minims, and subsequently to eight minims, three times daily, while the quinine and iron were also increased. Under this plan the ulcer gradually diminished in ex-

tent, and on January 15, 1873, *i. e.*, about five months after the commencement of treatment, it had completely healed; the knee, however, remaining contracted.

In August of the same year the mother of the child again brought her. Not only had the ulcer shown no disposition to break out again, but the cicatrix tissue had become soft and pliable, and the skin moved freely over the subjacent parts. The knee also had become quite free from contraction, and could be flexed or extended as desired. This latter result was attributed by the mother to the use of friction of the thigh with some kind of liniment. It was no doubt due to the cessation of pain and irritation of the limb, and the possibility of extending the leg without causing increased pain by the consequent movement. Perhaps, too, the shrinking of the cicatrix may have contributed towards a gradual extension of the knee in the first instance, the movement thus originated having been subsequently continued by the sense of ease it afforded to the patient.

#### Acute Rheumatism and Pyæmia.

At a meeting of a Branch of the British Medical Association a paper was read by Dr. Stephen Monckton, on "Acute Rheumatism Changing into Pyæmia." The object of the paper was to show, chiefly by the citation of two well marked cases, that pyæmia occasionally proceeds directly out of rheumatic fever, the progress of the latter assuming a perverted and malignant course. That a case of pyæmia, from the first, may for a time put on the semblance of rheumatism, and that rheumatic fever in a feeble subject may, though very rarely, lead to a fatal issue, with typhoid symptoms, was admitted at once. But more than this was affirmed; the contention being that genuine rheumatic fever, in a subject of average power, and without pernicious surroundings, may, and in these two cases did, abruptly alter its course in such wise that the development of lactic acid ceases, and blood-poisoning, with collapse, hemorrhages, gland-swelling, icteric hue, and almost certain death, succeed. A case, therefore, may die pyæmic, and yet have been correctly diagnosed as rheumatic at the outset; just as a patient may succumb to purpura and universal hemorrhages, who had been seized with small-pox to begin with; except that, in the former case, the primary disease will have been replaced by the secondary, instead of aggravated by it. Dr. Monckton suggested that too active saturation with alkalis might have mischievous tendencies in this direction; as also the undue exclusion of oxygen, from anxiety to keep the patient warm. In neither of the cases quoted was there any evidence of erysipelas, purulent or septic contamination from without, fibrinous concretion, or ulcerative endocarditis. The mischief seemed to arise from a perversion of the chemical blood-change; the production, effects, and elimination of lactic acid ceasing, and toxæmia of a more disintegrating and deadly

character replacing it. It may be remembered that pyæmia has been produced by the artificial introduction of lactic acid into the blood.

#### A Case of Diabetes Mellitus Treated with Opium.

The following case, under the care of Dr. Clay, is reported in the *British Medical Journal*:-

J. R., aged 16, a farm laborer, was admitted March 10th, suffering from diabetes mellitus. He complained of great debility and loss of flesh, constant thirst, and frequent passage of urine. There were no signs of phthisis present. His weight on admittance was 98½ pounds. During his first week in the hospital the average amount of urine passed was 9½ pints; the specific gravity varied from 1044 to 1060, and it contained a large quantity of sugar, no albumen. He was put on diabetic diet, and ordered mineral acids and bark. After about a month on this treatment, he was put on half a grain of opium, in pill, three times a day, together with the diabetic diet. The opium was gradually increased to one and a half grains three times a day, when it was decreased and eventually left off. For about a fortnight of this time the treatment had to be suspended, on account of an attack of ephemera coming on. The patient remained on diabetic diet alone for about a week; but as this did not appear to agree with him, he was ordered one grain of opium three times a day, and mixed diet; as this did not agree with him as well as the diabetic diet alone did, he was ordered diabetic diet together with the opium. Under this plan of treatment he improved very much, and left the hospital on September 15th, to resume his occupation, having gained 19½ pounds in weight, passing on the average eight pints eight ounces of urine less than he did when he was admitted, and there being a very great diminution in the amount of sugar.

## REVIEWS AND BOOK NOTICES.

### NOTES ON CURRENT MEDICAL LITERATURE.

—Drs. Foster and Balfour have just published a work that has long been needed. "The Elements of Embryology," in which the process of development is described, in a singularly lucid and intelligible manner, from the earliest period in the fowl, and which constitutes the first part of a larger work.

—A very interesting essay has been prepared by Dr. Fessenden N. Otis. Its title is, "On Reflex Irritation throughout the Genito-Urinary tract, resulting from contraction of the urethra at or near the meatus urinarius, con-



genital or acquired." The author touches on a topic often neglected, but eminently deserving of attention. pp. 37. McDivitt, Campbell & Co., 111 Nassau street, New York City.

—In a reprint from the *Medical Record*, Dr. George M. Lefferts describes the case of a brass ring lodged in the larynx for four years, successfully removed by sub-hyoidean laryngotomy.

—We acknowledge:—

Seventh annual Report of the Toronto Eye and Ear Infirmary.

Sixteenth annual Announcement of the Rush Medical College.

Twenty-first annual Announcement of the Royal College of Physicians and Surgeons, Kingston, Ontario.

### BOOK NOTICES.

**Eating for Strength; a book comprising:** 1. The Science of Eating. 2. Receipts for wholesome cookery. 3. Receipts for wholesome drinks. 4. Answers to ever recurring questions. By M. L. Holbrook, M. D., aided by numerous competent assistants. New York, Wood & Holbrook, 1875. 1 vol., cloth. 8vo, pp. 157.

This seems to us, from the examination we have given it, a good book, generally sound in its physiology, and free from hobbyisms. Its explanations of the relative values of foods are based on such authorities as Letheby, Flint, Parkes, etc., all solid men. The title page, as given above, sufficiently explains the scope of the work. The receipts seem fresh and judicious, and the part devoted to innocuous and wholesome beverages deserves warm commendation. Just such information as it contains, widely disseminated, will be a real aid to the temperance cause; better than a thousand overdrawn pictures, such as we have *ad nauseam*. Many men buy beer and juleps, simply because they are the cheapest and most palatable beverages, not because they seek a stimulus! Pleasant unintoxicating beverages are what we want to replace these insidious devices.

**A Practical Treatise on the Medical and Surgical Uses of Electricity; including Localized and General Faradization; Localized and Central Galvanization; Electrolysis and Galvano-Cautery.** By GEORGE M. BEARD, A. M.,

M. D., etc., and A. D. ROCKWELL, A. M., M. D., etc. Second edition, revised, enlarged, and mostly re-written. With nearly two hundred illustrations. New York, William Wood & Co., 27 Great Jones Street. 1875. 1 vol., 8vo, cloth, pp. 794.

The work of Drs. BEARD and ROCKWELL met with prompt acceptance by the American professional public, and the first edition of their treatise has been out of print for a long time. This interval has been diligently employed by the authors in a thorough re-examination of the subject in all its branches, and a further extension of the scope of the volume, to take in several departments of the subject omitted or insufficiently spoken of in the first edition. Several relations of electricity are spoken of, which are too frequently omitted in works of the kind, such, for example, as electro-physics, and the chemistry of the batteries.

The general division of the work is into sections on Electro-Physics, Electro-Physiology, Electro-Therapeutics, and Electro-Surgery. More than two-thirds of the book is taken up with the last two, and it is safe to say that no application of any form of electricity as a remedial agent that has ever been authorized will be found omitted. Indeed, the criticism if any, which the reader will be apt to make, is that the agent seems to be applied in so many directions and for so many purposes, that it is liable to excite the suspicion which every alleged catholicon rouses in the mind. In many of the cases given, the amount of benefit derived from the electrical treatment is far from clear. Two cases, for example, of writer's cramp are cited (p. 549), the latter of which is of questionable diagnosis, and neither resulted favorably. Too many of the diseases referred to as medicable by electricity, seem, on examination, to have been so treated by the authors only experimentally, and with no positive results. A "practical treatise," as this claims to be, should not contain clinical experiments, but the affirmative results of clinical *experience*—a very different matter.

In spite of this very observable fault (the worst of which is that it needlessly swells the bulk of the volume), the book contains a mass of well arranged information, and is carefully printed on fine paper, with many wood cuts, and a good index and table of contents.

## MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, FEB. 6, 1875.

D. G. BRINTON, M. D., Editor.

The REPORTER aims to represent the Profession of the whole country, and not merely sectional or local interests.

Hence, Reports of the Proceedings of Medical Societies, Correspondence, Notes, News, and Medical Observations from all parts of the country are solicited and will be gladly received for publication.

☞ Subscribers are also requested to forward copies of newspapers containing Reports of Medical Society Meetings, Marriages or Deaths of physicians, or other items of special medical interest.

The experience of *country practitioners* is often particularly valuable, acquired as it generally is by independent study and investigation. The REPORTER aims especially to furnish a medium to bring this information before the general medical public, and it is a duty to the profession to publish it.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

The Editor disclaims responsibility for any statement made over the names of correspondents.

## NOTICE. 1875.

## EXTRA INDUCEMENTS.

Any of our subscribers obtaining one new subscriber and remitting for both before Jan. 1st, 1875, will receive either a copy of the DAILY POCKET RECORD, with his name stamped in gilt on the clasp, free, or the HALF YEARLY COMPENDIUM for 1875, as he chooses.

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D. G. BRINTON, M. D.,

115 South Seventh Street,

PHILADELPHIA, PA.

## EXPERIMENTS ON ANIMALS.

"Doth God take care for oxen?" contemptuously asks the Apostle Paul, quoting the Mosaic injunction not to muzzle the mouth of the ox that treads out the corn; and answering in the negative, explains this phrase of the Law as a symbol applicable altogether to man. The Avesta of Zoroaster, composed about the time of the Pentateuch, is full of injunctions, even extravagant ones, about the tender treatment of dogs and cows. "Shall I spare the life of my enemy when I have him in my power?" asked a follower of Buddha. The great teacher replied, "Spare not only thine enemy, but even the wild beast that attacks thee. Inflict pain willingly on no living creature."

For thousands of years after did these principles of mercy find no expression in law or dogma. DESCARTES even discovered that the brute writhing in agony under the lash of its more brutal master is only exhibiting nervous irritability, and is not conscious of pain!

A noble-hearted Irish gentleman, by the name of RICHARD MARTIN, of Galway, Ireland, and a member of the British Parliament, was the first man that pleaded for the protection of the lower animals from torture. There was no effective check to the cruelty that certain classes practiced whenever they had the power, and no statute in any State or nation\* to prevent the cruelty, up to 1822.

Since that time societies have been formed in all the principal county towns and cities in Europe and America, for the prevention of cruelty to animals.

Such efforts enlist the warmest sympathy from every person of sensibility. But every virtue may be pushed to fanaticism; and in the opposition which has been made to the legitimate use of vivisection in physiological investigation, there is a strong dash of fanaticism.

Let any intelligent person recall the invaluable results which experiments on animals have thrown on physiology, surgery, and therapeutics. The two methods by which scientific pro-

gress and practical discoveries have been made in these directions have been observation and experiment. To take only a few examples: HARVEY'S discovery of the circulation of the blood; HALLER'S penetration into the laws of the physiology of the nervous system; MARSHALL HALL'S demonstration of the distinction of motor and sensory nerves and reflex actions; HUNTER'S operation for the cure of aneurism; WEBER'S detection of the inhibitory function of certain nerves; BERNARD'S researches on the vaso-motor system of nerves. The names of these men and the discoveries by which their names are remembered, as well as the whole history of anæsthetics, are associated with the suffering, of some kind or degree, or the death, of some of the lower animals. In medico-legal questions, again, even the most fastidious person would admit that experiments on animals were justifiable.

Let it be calculated, if it can be, how many millions of human beings have, by these discoveries—gained it is true at the expense of some suffering in a few of the lower animals—been relieved of miseries and endowed with a prolonged, useful, fortunate existence. If the maintenance of our government is worth one single battle, wherein, inevitably, thousands of men must perish and many thousands drag their mutilated bodies till the welcome release of death; then a thousand times over is the restoration of millions to life and health worth the suffering of some dozen dogs, or of all BROWN-SEQUARD'S guinea pigs, some twenty thousand of which, we believe, he estimates he has sacrificed on the altar of science.

But so super-sensitive has the world become on this topic, that there is danger of a brute's life becoming esteemed above a man's. There is something ludicrous in a fact vouched for by the Vienna *Medizinische Zeitung*, that in December last, Dr. Fisher, of that city, judging transfusion necessary in the case of a lady named Lucca (whether the patient is the accomplished prima donna we know not), en-

gaged the services of a surgeon for that purpose. A lamb was procured, but the veins either would not give blood, or no vessels could be found; at all events the operation could not be performed. The lamb died, and the lady was no worse for the failure. Yet the authorities have begun proceedings against the doctor, under the act for the prevention of cruelty to animals!

This does not surpass in absurdity the prosecution of Dr. MAGNAN, at Norwich, for demonstrating the respective effects of alcohol and absinthe on a dog, by injections in the crural veins. Yet, incredible as it seems, members of the medical profession of England, some whose names are not absolutely unknown to the scientific world, not only denounced the experiment, but said that its results were unimportant!

A timely and admirable little volume, of seventy-one pages, has just appeared, on this general subject, by Dr. J. C. DALTON, the well-known physiologist of New York (published by F. W. Christern, 77 University place). Its title is, "Experimentation on Animals, as a means of Knowledge in Physiology, Pathology and Practical Medicine." He considers the question of experimentation, in its character, its necessity and its results; and appends a series of resolutions of medical societies, and the personal testimony of distinguished men and experts, all going to show that experimenters aim at giving the least amount of pain possible; that the results obtained have been and continue to be of the highest practical utility, and that in no other way can progress in certain directions in medical and physiological science be secured.

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## NOTES AND COMMENTS.

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### Therapeutical Notes.

#### TREATMENT OF BILIARY CALCULI.

Dr. Laborde, of Paris, states that in this terribly painful affection morphia and hydrate of chloral, administered simultaneously, form the best mode of treatment. They exert both an anæsthetic and paralyzing influence, with the effect of producing cessation of the spasm-

dic state, distention of the passages, and accumulation of the biliary fluid, which act on the foreign body by a kind of *vis à tergo*, and force it down the intestines.

#### PITYRIASIS CAPITIS.

For this often obstinate complaint cocoa-butter, castor oil, almond oil, of each five drachms; turbith mineral, fifteen grains. Smear the scalp with the ointment twice daily, and wash the head with soap three times every week. It is necessary to cut the hair short and brush the head briskly, so as to remove the pellicles and lay bare the parasite. A larger quantity of turbith mineral may be used without inconvenience.

#### QUININE IN EPISTAXIS.

A writer in the *Lancet* says quinine is the remedy in epistaxis. He says he has tried it more than twenty times, often in aged people, and never has found it fail.

#### CHILBLAINS AND FROSTED FEET.

Remedies for these troubles are in order at this season. The most recent is cajeput oil. A writer says it is most efficacious. Apply it locally morning and evening. Often one application is sufficient for light cases.

#### MANAGEMENT OF HYDROCELE.

Mr. E. Lund, of the Manchester Hospital, in a recent report, says "the secret of success in the management of hydrocele consists in thoroughly distending the sac of the hydrocele, by first noting the number of fluid ounces of serum drawn off, and then injecting at least one ounce more of port wine, so as thoroughly to expand and fill the sac."

#### RECURRENT CHRONIC BRONCHITIS.

Many persons are subject to attacks of chronic winter cough, commencing with difficult breathing and a hard dry cough. In this stage, says Dr. Lawrie, of Glasgow, no remedy gives such prompt relief as *iodide of potassium*. It promotes and restores the bronchial secretion, and tranquilizes the respiration. When free secretion has set in, it should be abandoned.

#### On Right-Handedness.

This was the subject of a discussion at the Cambridge Philosophical Society last November. Dr. W. Ainslie Hollis presented a paper, in which right-handedness was attributed to the larger size of the left cerebral hemisphere, and its greater complexity and richness in gray

matter. But this may be consequence rather than cause. Dr. Hillis claimed that right-handedness is peculiar to the human race, in which he is certainly wrong (see Flint's *Physiology*, vol. v, p. 457). Some apes are left-handed, but most are right-handed. Lawson, in his "History of North Carolina," (1706), makes the remark that the Indians are right-handed. (Is this true of all tribes?). Professor Humphries, a very competent anatomist, concluded the discussion by saying that he could see no anatomical reason for the preference of the right limb, the slight advantage in circulation to the right arm through the innominate artery and vein applying, in nearly equal degree, to the right side of the brain. He agreed that right-handedness was much a matter of education, and followed from the multifarious single-handed offices which are associated with the higher mental endowments.

#### Execution by Hanging.

Two executions took place in January, one near, one in Philadelphia. If the barbarous and notoriously inadequate punishment of death (after time has been allowed to secure salvation!) is to be continued, why cannot some more civilized means be employed to effect it? Why not revert to the classical and decent cup of hemlock? To the painless and historic death by suffocation? To the anæsthetic vapor which wafts so many to the land beyond during our efforts to prolong their stay here?

That hanging prevents murder we do not a bit believe. A century ago, in England, a man who killed a hare or stole a pair of shoes was sent to the gallows. Are those crimes more frequent since a month or two at the House of Correction takes the place of the cart to Tyburn Hill? They are not. The *British Medical* suggests the revival of *castration* for a certain set of crimes. It quotes from an old authority that if this plan were adopted, and five hundred examples made, it would have such an influence upon the wicked, that our judges and juries would have much less business on their hands. The castration would cool the heat of those guilty of rape and sodomy; and, as theft and rapine often run in the blood, such a law would disable a set of vile people from leaving their pernicious breed behind them. Hector Boece affirms that the ancient Scots gelded such as labored under madness or infectious distempers, which they thought might be communicated to



their offspring. Evidently they believed devoutly in the doctrine of hereditary descent.

#### Railroad Surgeons.

The Philadelphia and Erie Division has an arrangement with twenty competent surgeons in various cities along its line, to attend all employees and others injured on or about the line of the road. The nearest physician attends for one visit, and then the injured person can select any of the twenty, and be removed to the town where he lives, and receive his attendance free. The following rules are published by the Company.

"In all cases of personal injury it will be the duty of any employee of this Company, who may be present, to render all practicable aid to the injured party; to procure promptly the services of the nearest physician, giving preference to those named above; and as soon after as possible make a full report of the case to the head of his Department."

"For Medical or Surgical services rendered under foregoing circumstances during the two days next succeeding the accident (and longer if furnished under written orders from the General or Division Superintendent), the Lessee will be responsible, but not otherwise, and all bills for Medical or Surgical services rendered in accordance with the above must be approved by the Surgeon in Chief."

The Surgeon in Chief (who has appointing power) is Dr. H. A. Spencer, of Erie, a most excellent choice.

#### Torsion in Hemorrhage.

Mr. Bryant, of Guy's Hospital, London, has been for some years urging the superiority of torsion to the ligature. He does not use the latter even in an amputation of the thigh! In this country he has an ardent supporter in Dr. T. Easley, of Dallas, Texas, who has lately published a pamphlet on the subject. From his little work we extract the method of using torsion, as follows:—

"As to the exact mode in which torsion should be done, there does not appear to be any secret about the matter or any uncommon dexterity required. The vessels of a limb, when the main trunk has been properly secured, generally present fairly enough, and time is allowed to do the work, even leisurely. The vessel is to be drawn out, as in the application of a ligature, then firmly taken hold of with a pair of

blunt serrated forceps, and three or more sharp rotations made, the number of these to be regulated a good deal by the size of the artery. Some may find it convenient to steady the vessel with a second forceps, a little above the cut extremity, but Bryant, who has twisted a greater number of arteries than any man living, and who has yet to record a single failure, uses only the one pair."

#### Statistics of Physicians and Druggists.

A writer in the *American Journal of Pharmacy* gives some tables from the last three census reports, by which it appears that the physicians have increased in about the same ratio as the population, the variation being very trifling for the past twenty years, while the druggists have increased in very much greater proportion; the ratio being, for the ten years from 1850 to 1860, 79.7 per cent., while the increase of population was 34 per cent.; and for the period from 1860 to 1870, they increased 57.4 per cent., while the population increased but 23 per cent. The patent medicine manufacturers have increased at each interval over 100 per cent.

In 1850 there was one physician to 572 persons, in 1860, one to 576, and in 1870, one to 638.

#### On Vaginitis.

Dr. Finch, of Chicago, in the *Medical Examiner*, speaks of the treatment of vaginitis. Premising that generally one cannot distinguish between specific and simple, he says that in the acute form, warm sitz baths, mucilaginous vaginal injections, and saline laxatives are useful, and anodynes if there be pain. He recommends an injection of four drachms of chlorate of potash, and ten grains of permanganate of potash, in sixteen ounces of water, of which a teacupful is to be injected morning and evening. Tampons of cotton-wool dipped in tannate of glycerine are useful, introduced every three days, taking care not to stain the linen with the tannin.

#### Spurious Red Wine.

It is stated that the French wine manufacturers often use aniline reds to color the wines. These dyes are poisonous, and make the liquor unwholesome. Mr. E. Dietrich states that if the wine is diluted with fifty times the quantity of water, the pure article becomes almost colorless, while the artificially colored retains a

tolerably marked bluish red. Diluted twenty times, and tested with a weak solution of sulphate of copper, the true wine is colorless or nearly so, the false shows a violet blue. The presence of fuchsin can be readily recognized in the following manner:—Place about one and a half ounces of the suspected compound in a phial, and treat first with one hundred and fifty grains of subacetate of lead, and then with three hundred grains of amylic alcohol. If, after agitating the mixture, the alcohol which separates appears colorless, no fuchsin is present; if the alcohol is colored red, the reverse is the case.

#### Milk Kept by Chloroform.

That milk can be kept sweet by the addition of a little chloroform is a suggestion for which we have to thank Mr. J. P. Barnes, of London. When added in sufficient quantity to fresh milk, the lactic fermentation is prevented. To two eight fluid ounces of fresh milk was added respectively, ten and twenty minims of chloroform; they were kept in a warm place, and occasionally agitated; after five days had elapsed, that containing ten minims had developed lactic acid in quantity sufficient to separate the caseine, whilst that containing twenty remained fresh and good. It might be found convenient to preserve milk in this manner, always taking care to boil it just before using, in order to drive off the chloroform.

#### "Light-wood."

The light emitted by rotting wood has been attributed to the chemical process of decomposition. Recent investigations show that it, in fact, proceeds from an organic growth, a minute cryptogamous plant, and ceases when this is destroyed by heat or chemicals. The plant can be transplanted to animal tissues, and its presence may account for that curious aureole occasionally seen in disease of the lungs, etc., which Brown-Sequard refers to nervous action, and which was discussed editorially a few weeks back (REPORTER, January 9).

#### Death from Methylene.

A death from methylene has occurred in London Hospital. Only three drachms were administered, the patient being a woman of twenty-five, about to be operated on for lachrymal fistula. Every effort was made to save her, but in vain.

## CORRESPONDENCE.

### FOREIGN.

#### On Lymphadenoma and Lymphangioma Cutis. (TRANSLATION).

VIENNA, January 4th, 1874.

ED. MED. AND SURG. REPORTER:—

In the MEDICAL AND SURGICAL REPORTER, of the 17th of October, 1874, page 318, I find the disease "Lymphangioma Cutis," which I have described in Hebra's and Kaposi's *Lehrbuch der Hautkrankheiten*, vol. iii, p. 387, has been referred to under the head of "Hodgkin's Disease."

You would do me a great favor, and at the same time prevent the possibility of a misunderstanding, if you would insert the following remarks in your valuable journal:—

The disease described by me as "Lymphangioma Cutis Tuberosum Multiplex," is totally different from "Hodgkin's Disease." In the latter disease you have *sub-cutaneous* nodes composed of hyperplastic *sub-cutaneous lymphatic glands*. In "Lymphangioma Cutis," you have *cutaneous* nodules, no larger than lentils, which are immovable, situated in the *corium*, and can be compared to the papules of a lenticular syphilide. Upon microscopic examination, they are composed of a conglomeration of dilated thick-walled *capillary lymphatic vessels*.

The two diseases, therefore, have not the slightest analogy with each other.

Very respectfully,

DR. KAPOSI.

[The above letter from Professor Hebra's distinguished associate will be perused with great interest by all acquainted with recent advances in dermatology. It is with much diffidence that we express any disagreement with so eminent an authority. But while we cheerfully concede the general distinction which Dr. Kaposi lays down between the two diseases, we are obliged to consider that his closing expression (*Beide Krankheiten haben nicht die geringste Analogie mit einander*), is open to some necessary modification.

In a very marked case of "Hodgkin's Disease," recently described before the College of Physicians of this city, by Dr. James R. Hutchinson (a full report of which will appear in our next number), the lymphadenomatous tumors appeared, "for the most part situated beneath the skin, a few, however, projecting as pedunculated appendages." On post-mortem it is stated "a few of the tumors were pedunculated, and took their origin in the true skin." These were, moreover, hard to the touch, not movable, and small in size.

There seems to us to be quite a striking ana-

logy between these two forms of disease, both confessedly arising from disturbance of the lymphatic system, the one manifesting the effects of its explosion in the capillary lymphatic vessels exclusively, the other both in these and in the lymphatic glands generally throughout the system.—ED. REPORTER.]

### DOMESTIC.

#### The Surgical Treatment of Anthrax.

ED. MED. AND SURG. REPORTER:—

In this painful disease, I would suggest a somewhat different surgical treatment from that ordinarily pursued. It is constantly observed that in anthrax the quantity of matter is comparatively small, and is diffused through the slough, to which it is only collateral, and as the latter is adherent equally throughout, there exists no more pressure in one direction than another, and therefore no single or general pointing takes place; but in protracted cases, we generally observe several holes or openings which give exit to the small quantity of pus in their vicinity, leaving the slough still adherent, therefore in no manner tending to the removal of the disease. Thus the openings are too small to discharge the slough, and if larger, the slough is too adherent to the adjoining parts to be cast off. Under these circumstances we can understand how the sphacelation of the skin over the slough might lead to a radical cure, by removing one of the causes of the slough being retained in its position, and allowing nature to cast off its subjacent attachments, and we take a step in this direction, when we make the crucial incision, so properly laid down for practice. The physician is generally called in at an advanced period of the disease, and finds his patient in a state of great pain and mental and physical prostration. It is this period, between the operation and termination of the disease, that is most critical for the patient and anxious to the physician, and with the view of relieving both, I venture to recommend a mode of treatment which in my case proved to be successful.

CASE. I was called to see Mr. C., the 15th of May last. He was a worn-out man, about sixty-two years of age, very thin, and with a countenance full of pain and anxiety. On examination, I found he had an enormous anthrax covering the inferior portion of the scapula, and extending from its anterior edge to the spinous process of the vertebrae. My first impression was that the disease was too far gone for operation; my second, that it was the only course which held out a hope. With my scalpel I made a full and free crucial incision through the tumor. The edges of the wound bled freely for a little; that having subsided, I ordered a large poultice to be applied, and his strength kept up. The next day found the inflammation surrounding the parts diminished to a great extent. As I looked on the emaciated

frame, and Hippocratic countenance, I felt the poor fellow could not survive the separation of the slough. As I thus reflected, I raised an angle of the skin, stretching the slough, which firmly adhered to it. With the forceps and scissors I nipped away the entire slough from the sound parts, going as close as possible to the latter without wounding them, and drawing the edges of the wound together into contact, with adhesive strips, I applied a bandage and waited the result. In four days I could scarcely credit the improvement which had taken place. The edges of the wound were united through two-thirds of their extent, and in the course of ten days, with the assistance of porter, quinine, iron and good food, a wound the size of a twenty-five cent silver piece, on the high road to cicatrization, remained. Had the slough been allowed to separate spontaneously, or even with the aid of turpentine and warm dressings, I question much if such a happy result would have taken place, as nature (at best with all the assistance I could have rendered her) would have required as many days to produce that condition of parts which the scissors effected in as many minutes.

Respectfully yours,

Philadelphia.

R. K. HINTON, M. D.

### NEWS AND MISCELLANY.

#### Epidemic of Influenza.

It is reported that in New York city and Brooklyn diphtheria and influenza are prevailing to an extent altogether unusual. The percentage of fatal cases, it is true, is nothing alarming, but the seemingly epidemic character of the influenza recalls the almost universal prevalence of that complaint among us two years ago.

Dr. J. Butts, of Ottawa, Iowa, says, in a letter to us, dated January 25th:—

"We are having a malignant type of epidemic influenza now, all over this country (as far as the human race is concerned); none are exempt from it. The common symptoms are a dry, hacking, wheezing cough, with more or less fever; a loss of strength, with sleepless nights; in a majority of cases it is complicated with some other disease. It is causing a greater mortality than it did two years ago in the west."

Will our readers please inform us of any such epidemics in other localities?

#### Small-pox Epidemics.

Each extreme of the Atlantic seaboard is suffering from epidemic of variola.

A letter from Havana, dated the 20th ult., says the small-pox is still raging throughout Cuba, and causing many deaths.

Small-pox is reported as prevailing alarmingly in Charlottetown, Prince Edward's Island, owing to carelessness in regard to means of prevention.

## Philadelphia County Medical Society.

The next conversational meeting will be held at the Hall of the College of Physicians, Wednesday, February 10th, at 8 o'clock, P.M.

Dr. George Hamilton will read a paper, subject, "Remarks on the Diagnosis, Prognosis, and General Management of Typhoid Fever."

The medical profession in Philadelphia are cordially invited.

## Medical Society of Mecosta Co., Michigan.

This society held its annual meeting at Big Rapids, January 12th, 1875. After essays had been read by Drs. Badger and Hendryx, an election for officers was held, with the following result: President, Dr. J. W. Badger; Secretary, Dr. W. W. Bowes; Treasurer, Dr. S. P. Phelps.

## Personal.

—Mr. Francis Kiernan, F. R. S., the distinguished anatomist and physiologist, died in London, December 31st, in the seventy-fifth year of his age. He derived most fame from his studies of the liver.

—The *Lancet* pays, in its review of last year's progress in medicine and surgery, the following compliment to an American physician:—

"One of the most important advances in forensic medicine has been made by Dr. Richardson, of Philadelphia, who, by employing a micrometer and the higher powers of the microscope, has shown that a distinctly recognizable difference exists in the size of the blood-cells of man and the other mammalia."

## Items.

—In the German Empire, there is one student of medicine to 11,046 inhabitants.

—The deaths in this city during the week ending January 23d were 355, against 282 for the corresponding week last year.

—A case of four children at one birth is reported at Erie, Pa. The delivery took place January 7th. The infants were all females, and all died within four days. Dr. H. A. Spencer, of Erie, informs us that this newspaper statement is correct.

—The health of the Russian army is well cared for. The mortality is only 15 per 1000 men annually. The department of Wilna, in Russian Poland, is the healthiest; the most insalubrious is that of Kazan, four hundred and thirty miles east of Moscow, where there is appropriately located one of the best medical schools in the Czar's dominions.

## QUERIES AND REPLIES.

## History of Pharmacy.

*Synopsis.* Several histories of pharmacy have appeared. The latest is that by Frederking, *Grundzüge der Geschichte der Pharmacie*, Göttingen, 1874.

## Death of Rabelais.

Dr. S. L.—The current statement that Rabelais joked and jested to the last minute of his life is doubtful, but his will is said to be well attested! It runs: "I have little, I owe much. The remainder I leave to the poor!"

## Pectoral Tea.

Dr. James P. S., of Ohio.—The formula for this is

Marshmallow root,	8 parts
Liquorice root,	3 "
Orris root,	1 "
Coltsfoot,	4 "
Flowers of common mullein,	2 "
Star anise,	2 " M

About an ounce to the quart.

## OBITUARY.

## DR. JAMES M. KNOX,

A popular and well known physician, committed suicide at his farmhouse in Essex Junction, Vt., on January 15th. He was born in Tunbridge, Orange county, and was about 41 years of age. He graduated from the University of Vermont, in 1848, and from Castleton Medical College in 1851, settled in practice at Richmond, but removed to Burlington in 1852, where he remained in active practice until about a year ago, when his mental and bodily health seemed to fall him. He had been many years subject to fits of despondency, until his sufferings were terminated by his own hand. The *Press* thus describes his death:—

"On the evening of his death, a few minutes after taking his medicine, he went into a dark pantry, as was his frequent wont, to get a drink of cold tea. Near the customary place for the teapot lay a large kitchen knife, with broad blade and sharp point. On this, it is supposed, his hand fell; and it is not impossible that the contact with the knife aroused the sudden impulse to suicide. He took it, passed hastily to the piazza, and at once stabbed himself to the heart. He was a powerful man, and made thorough work. Two stabs penetrated the heart, and a third took effect lower down in his side.

## MARRIAGES.

FARRAND—KIMBALL.—At Colon, St. Joseph Co., Mich., at the residence of the bride's parents, Dec. 24th, 1874, by the Rev. J. B. Gilman, of Manchester, Mich., Charles H. Farrand and Miss Henrietta Kimball, only daughter of H. C. Kimball, M. D., all of Colon.

IRVIN—MCCREA.—On Tuesday morning, November 27th, 1874, by Rev. D. W. Collins, George Irvin, M. D., of Aled, Mercer Co., Ill., and Mrs. E. B. McCrea, of Blairsville, Indiana Co., Pa.

## DEATHS.

APPLE.—After a brief illness, of only ten hours, on the morning of the 13th inst., of congestion of the brain, Sallie E., wife of Dr. Samuel S. Apple, of the city of Allentown, Pa., aged 25 years, 10 months, and five days.

KNOX.—In Essex Junction, January 15th, James M. Knox, M. D., aged 54 years.

SMITH.—At St. Alban's, Vt., Stebbins Asa Smith, aged 57 years.